

**What is claimed is:**

- 1           1. An apparatus comprising:  
2           a capacitor having a body and a pair of terminals attached to the  
3           body; and  
4           a conductor defined on the body and connecting the terminals, the  
5           conductor having an inductance (L) defining with a capacitance (C) of the  
6           capacitor a parallel LC circuit.
  
- 1           2. The apparatus of claim 1 wherein:  
2           the conductor is plated on the body.
  
- 1           3. The apparatus of claim 1 wherein:  
2           the conductor is printed on the body.
  
- 1           4. The apparatus of claim 1 wherein:  
2           the conductor has a width defining the inductance such that the  
3           inductance is varied by varying the width of the conductor.
  
- 1           5. The apparatus of claim 1 forming a notch filter.
  
- 1           6. The apparatus of claim 5 wherein:  
2           the capacitor has a resonant frequency greater than or equal to a  
3           notch center frequency of the notch filter.
  
- 1           7. A notch filter having a notch center frequency, comprising:  
2           a capacitor having a body and a pair of terminals attached to the  
3           body, the capacitor having a resonant frequency equal to or greater than  
4           the notch center frequency; and  
5           a conductive trace extending along the body and connecting the  
6           terminals, the trace having an inductance.

1           8. The notch filter of claim 7 wherein:  
2           the trace is defined on the body.

1           9. The notch filter of claim 8 wherein:  
2           the trace is plated on the body.

1           10. The notch filter of claim 8 wherein:  
2           the trace is printed on the body.

1           11. The notch filter of claim 7 wherein:  
2           the trace has a width defining the inductance such that the  
3           inductance is varied by varying the width of the trace.

1           12. The notch filter of claim 7 for connecting between two discrete  
2           segments of a signal conductor defined by a printed circuit board that also  
3           defines a ground plane, wherein:  
4           a product of capacitance and inductance of a virtual conductive  
5           loop formed by the notch filter and the ground plane equals the notch  
6           center frequency.

1           13. A printed circuit board (PCB) comprising:  
2           a signal conductor comprising a pair of discrete conductor  
3           segments defined by the PCB;  
4           a ground plane defined by the PCB;  
5           a capacitor having a body and a pair of terminals on the body that  
6           connect the capacitor between the segments;  
7           a conductor defined on the body and connecting the pair of  
8           terminals and having an inductance, the conductor forming with the  
9           capacitor a notch filter for the signal conductor such that a product of  
10          capacitance and inductance of a virtual conductive loop formed by the

11 notch filter and the ground plane equals a center frequency of a notch of  
12 the notch filter.

1 14. The PCB of claim 13 wherein:  
2 the capacitor has a resonant frequency equal to or greater than the  
3 center frequency of the notch filter.

1 15. The PCB of claim 13 wherein:  
2 the conductor is plated on the body.

1 16. The PCB of claim 13 wherein:  
2 the conductor is printed on the body.

1 17. The PCB of claim 13 wherein:  
2 the capacitor is a surface-mount capacitor.

1 18. The PCB of claim 13 wherein:  
2 the conductor has a width defining the inductance of the conductor  
3 such that the notch filter is tuned by varying the width of the conductor.